REMARKS

This amendment is submitted under 37 C.F.R. § 1.116 responsive to the final Office Action[1] mailed on March 3, 2006. Claims 1-63 were presented for examination and were rejected. Claims 1, 4-17, 19-21, 24-37, 39-42, 44-57 and 59-63 are currently amended. No claims are added or canceled. Claims 1-63 are pending.

Applicants acknowledge with appreciation the opportunity to have discussed the instant application with the Examiner by telephone on March 14, 2006. In that telephone conversation the Examiner expressed her concern about the use of the word "purported" in the claims and suggested that "purported" be removed. The final Office Action, page 31, touches on the same issue. Applicants believe that the term "purported" is appropriate under the circumstances, as described in the specification, but are willing to remove the term per the Examiner's preference. That term has been removed from all claims, and that is the only amendment made herein to the claims. Obviously, no new matter is added. Accordingly, this amendment does not expand the scope of the claims, does not require further searching or consideration, and should be entered under Rule 116.

[1] The Office Action may contain a number of statements characterizing the cited references and/or the claims which Applicants may not expressly identify herein. Regardless of whether or not any such statement is identified herein, Applicants do not automatically subscribe to, or acquiesce in, any such statement. Further, silence with regard to rejection of a dependent claim, when such claim depends, directly or indirectly, from an independent claim which Applicants deem allowable for reasons provided herein, is not acquiescence to such rejection of that dependent claim, but is recognition by Applicants that such previously lodged rejection is moot based on remarks and/or amendments presented herein relative to that independent claim.

The amendment is supported by the application as filed. For example, *see* at least: Title; page 1, lines 12-15; page 7, line 22-page 8, line 7 (reproduced below); page 8, lines 15-16 and lines 19-23; and page 48, lines 2-5.

> "This master node solution is very satisfactory in any DDB network or domain within that network in which only one master node asserts itself on participating nodes in that network or domain, which may be the usual case, particularly with LANs. However, if another user of the network gains access to the global administrator's password, either with or without proper authorization, and if that other user selects a second master node (a purported or contending master node) in the same domain that had a previously operative master node, then a conflict results. All nodes in the configuration would then be subject to assertions by two different master nodes that each of those master nodes is the true master for each node in that domain." (Specification, page 7, line 22 - page 8, line 7, Emphasis added.)

Thus, the specification discusses a "previously operative master node" (a first master node) and a "second master node" in conflict in the same network or domain.

The final Office Action, page 2, advises that it maintains the rejection as set forth in the last Office Action mailed on September 23, 2005. Accordingly, claims 1, 2, 19, 20-22, 39-42, and 59-63 are rejected under 35 U.S.C. §102(e) as being anticipated by Frazier et al. (U.S. Patent No. 6,941,350, hereinafter "Frazier"). Claims 3, 4, 23, 24, 43, and 44 are rejected under 35 U.S.C. §103(a) as being un-patentable over Frazier and further in view of Quoc et al. (U.S. Patent No. 6,092,214, hereinafter "Quoc"). Claims 5-7, 25-27 and 45-47 are rejected under 35 U.S.C. §103(a) as being un-patentable over Frazier in view of Quoc and further in view of Lind (U.S. 2002/0080807, hereinafter "Lind"). Claims 8, 9, 16, 17, 28, 29, 36, 37, 48, 49, 56 and 57 are rejected under 35 U.S.C. §103(a) as being un-patentable over Frazier in view of Quoc in view of Lind and further in view of Michelson et al. (U.S. Patent No. 6,665,730, hereinafter "Michelson"). Claims 10-15, 30-35 and 50-55 are rejected under 35 U.S.C. §103(a) as being un-

patentable over Frazier in view of Quoc in view of Lind in view of Michelson and further in view of Bodnar et al. (U.S. Patent No. 6,295,541, hereinafter "Bodnar"). And finally, claims 18, 38 and 58 are rejected under 35 U.S.C. §103(a) as being un-patentable over Frazier and further in view of Logan et al. (U.S. Patent No. 5,968,121, hereinafter "Logan").

Applicants respectfully traverse these rejections because the applied prior art taken individually or in combination does not disclose or suggest all of the claim elements in each of Applicants' claims at least because Frazier does not disclose two master nodes.

Frazier Does Not Disclose Two Master Nodes

Consider, for example, independent claim 1. Claim 1 is rejected under 35 U.S.C. §102(e) as being anticipated by Frazier. Claim 1 recites:

> In a computer network having a plurality of nodes each of which has a DDB and one of which should be master node used to maintain contents of said DDB in each of said plurality of nodes consistent throughout said plurality in a manner to avoid a single point of failure, said plurality of nodes including a first master node and a second master node, a system for resolving conflict in said network between said first master node and said second master node comprising:
> means for establishing a standard for comparison between said first master node and said second master node;
> means for comparing said first master node against said second master node in accordance with said standard to obtain comparison results; and,
> means for selecting said master node from the group of nodes consisting of said first master node and said second master node based on said comparison results. (Claim 1, emphasis added.)

It is clear that claim 1 calls for, *inter alia*, a system for resolving conflict between two master nodes. Frazier does not disclose a technique for resolution between two *master* nodes, at least because it *does not disclose two co-existing master nodes* in the first place. Rather, Frazier discloses, at best, choosing *a master* subnet manager from a

plurality of *potential master subnet managers*, which is not even close to the activity being claimed, to be discussed in detail below. Consider the following:

- Frazier is primarily directed to a method and apparatus for reliably choosing a master network manager during initialization of a network computing system. (Title)
- *Only one* subnet manager is the *master* subnet manager. "The SAN architecture supports the notion of multiple subnet managers per subnet and specifies how multiple subnet managers negotiate for *one* to become the *master* subnet manager." (Emphasis added, Frazier, col. 9, lines 51-54).
- "The SM_Key provides a[n] additional level of authentication authority to control *which subnet manager* is allowed to be the *master* subnet manager." (Emphasis added, Frazier, col. 9, line 67 to col. 10, line 2)
- "When a SAN network is initializing, a priority scheme determines *which* of the potential subnet managers has the *highest* priority and therefore actually *becomes the master* subnet manager over the subnet." (Emphasis added, Frazier, col. 10, lines 7-10)
- "During initialization, multiple subnet managers are available until *one* is chosen as the *master* subnet manager." (Emphasis added, Frazier, col. 10, lines 17-19)

From the foregoing passages in Frazier, it is clear that there is only one *master* subnet manager, but there may be many subnet managers each of which is a *potential* master subnet manager. But, a *potential master* subnet manager is *not* a second *co-existing*

master subnet manager in conflict with a master subnet manager. Consider further disclosure in Frazier:

> The present invention provides a method, apparatus, and computer implemented instructions for supporting the multiple subnet managers in a subnet and specify how multiple subnet managers negotiate for one to become the master subnet manager. During the SAN fabric configuration process at initial bring-up time, the subnet managers scan the network in order to discover the components that are connected to the network. If the subnet managers find a component that contains another subnet manager, then the subnet managers negotiate based on a previously setup priority. In the depicted examples, if the priorities are the same, then the winner of the arbitration process is the one with the lowest globally unique identification (GUID). The GUID is unique across the network, and therefore *there can only be one winner of the arbitration among all the possible subnet managers in the network.* Defining this master subnet manager negotiation precisely is important in order to assure interoperability of subnet managers from different manufacturers. (Frazier, col. 10, lines 20-38, Emphasis added.)

This language is telling us that there is a negotiation, but for the purpose of determining only *ONE* master subnet manager, culled from a population of all possible subnet managers. There is an arbitration process, but for the purpose of determining only *ONE WINNER,* and that winner is the **master** subnet manager. This is describing an orderly way for the network to arrive at a **master** subnet manager, not how to deal with the unfortunate and undesirable situation where *TWO master* subnet managers happen to co-exist. **Frazier does not disclose co-existence of two *master* subnet managers.** Thus, Frazier does not even address the problem solved by Applicants' claimed subject matter.

The problem solved by Applicants' claimed subject matter is presented in the specification, at least pages 46-49:

> The global administrator, as noted above, is a network user with special privileges. Only this person, or someone under his/her authority, has appropriate password access to the dialog of Fig. 8 to select or appoint a master node. If another user, either subsequently or simultaneously, also selects a different node to be master node, then a conflict results. In this example, a user located in Japan selects a node located in Japan (M-1) to be master node, and this

> selection is made by way of communication link 1004 through a GUI located in Japan with the unauthorized user. At this point, M-1 announces itself ("I am the master for you") to each of the nodes in the network and the nodes in the network are in conflict because they had been properly aligned to master node M-2 and do not know if they should acknowledge new master node M-1 or not. At this point there is a question or ambiguity about which node is really the master node, whereby both nodes can now be referred to as "purported master" or "contending master" nodes until such ambiguity is removed. However, for purposes of facilitating discussion in connection with Figs. 10 - 14, "master" may be used rather than "purported master" in every instance, but a purported master node under a cloud of ambiguity shall be intended until the master conflict is resolved. (Applicants' specification, page 47, line 13- page 48, line 5, Emphasis added.)

As this section of Applicants' specification indicates, two nodes simultaneously co-exist as masters (termed "purported" or "contending" masters because of the ambiguity, but co-exist with equal master status until resolved). In this example given in the specification, a user somehow caused a second master to co-exist with another node which had previously been the network's master node. This problem is not being addressed in Frazier, where only one *master* subnet manager is disclosed, and where only one *master* subnet manager exists at any given time.

Claim 1 recites, *inter alia*: "means for establishing a standard for comparison between said first master node and said second master node" (emphasis added). The Office Action cites Frazier, column 10, lines 7-10 against this claim element: "When a SAN network is initializing, a priority scheme determines *which of the potential subnet managers has the highest priority* and therefore actually becomes the master subnet manager over the subnet" (emphasis added). This section of Frazier refers to "which of the potential subnet managers has the highest priority" and this language means that Frazier, at best, discloses a standard for comparison between *potential subnet managers*. As explained in detail above, potential subnet managers are not **master** subnet managers.

Indeed, this section of Frazier, or elsewhere in Frazier, does not teach a "master" to "master" conflict and therefore does not, and cannot, disclose "means for establishing a standard for comparison between said first master node and said second master node" as recited in claim 1. The 35 U.S.C. § 102(e) rejection of claim 1 over Frazier should be withdrawn for this reason alone.

Claim 1 also recites, *inter alia*: "means for comparing said first master node against said second master node in accordance with said standard to obtain comparison results" (emphasis added). The Office Action cites Frazier, col. 11, lines 49-51 against this claim element. This section of Frazier says: "If a subnet manager having a higher priority is detected or a master subnet manager is detected, then state machine 800 shifts to a standby state S2." This section merely compares subnet manager priorities or detects the existence of a master subnet manager, but does not compare a first master node against a second master node. Therefore, this section, or elsewhere in Frazier, does not disclose or suggest: "means for comparing said first master node against said second master node in accordance with said standard to obtain comparison results" as recited in claim 1. The 35 U.S.C. § 102(e) rejection of claim 1 over Frazier should be withdrawn for this reason alone.

Claim 1 also recites, *inter alia*: "means for selecting said master node from the group of nodes consisting of said first master node and said second master node based on said comparison results" (emphasis added.) The Office Action cites Frazier, col. 12, lines 20-32 against this claim element. This section of Frazier says:

> In discovering state **S1**, state machine **800** shifts into master state **S4** if the subnet manager discovers that it has the highest priority and its discovery process is

> complete. While in the master state S4, the master subnet manager configures the subnet unless the subnet is already configured. Further, in this state the subnet is periodically monitored for changes in configuration. If a change in configuration is detected, the master subnet manager sends request packets to the appropriate ports to determine the specifics of the reconfiguration. If in master state S4, one or more subnet managers are discovered having a higher priority, a handover subnet management packet may be sent to the master subnet manager having the highest priority. In response to receiving an acknowledge packet, state machine **800** shifts from master state S4 to standby state S2. In master state S4, if the subnet manager receives a handover subnet management packet from the lower priority subnet manager, this event does not cause a state transition out of master state S4. (Frazier, col. 12, lines 20-32, emphasis added.)

This section merely describes selection of a subnet manager as master if it has the highest priority, but this selection is made from a plurality of subnet managers, not from two master nodes. Also, this section merely describes a handover to a subnet manager having a higher priority than the selected subnet manager. This handover is not a selection of a master from between two master nodes, but is merely a transfer of status from a master node to another node which is not master but which should be master because it has a higher priority. Two masters do not co-exist and compete in Frazier. Therefore, this section, or elsewhere in Frazier, does not disclose or suggest: "means for selecting said master node from the group of nodes consisting of said first master node and said second master node based on said comparison results" as recited in claim 1. The 35 U.S.C. § 102(e) rejection of claim 1 over Frazier should be withdrawn for this reason alone.

MPEP § 2131 states that to anticipate a claim, the reference must teach every element of the claim. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). "The identical invention must be shown in as complete detail as is contained in the ...claim." *See Richardson v. Suzuki Motor Co.*, 868

F. 2d 1226, 1236, 9USPQ2d 1913, 1920 (Fed. Cir. 1989). In this instance, not only is one of the claim elements not taught, ALL of the claim elements of claim 1 are not taught by the reference. For this reason, Applicants respectfully request that the rejection of claim 1 under 35 U.S.C. § 102(e) be withdrawn.

The other cited references do not cure this deficiency of principal reference Frazier. Quoc was cited to show temporal subject matter and does not cure this deficiency in Frazier. Lind was cited to show selection of a master node based on IP addresses and does not cure this deficiency in Frazier. Michelson was cited to show subject matter relating to recording local time of selection of the first node as master node and does cure this deficiency in Frazier. Bodnar was cited to show the noting of local time of receipt of communication of the first selection duration and does not cure this deficiency in Frazier. And, Logan was cited to show a system where the network is globally-dispersed in different time zones and does not cure this deficiency in Frazier. Thus, any combination of these references with Frazier does not cure the deficiency in Frazier wherefore any potential rejection of claim 1 under 35 U.S.C. § 103(a) based on any one or more of these references is without merit.[2]

Therefore, for the reasons given above, Applicants submit that claim 1 is allowable and should be passed to issue.

Each one of the other independent claims, 19-21, 39-41 and 59-63 contains a recitation of "first master node" and "second master node." Claims 19-21, 39-41, and 59-

[2] Applicants do not acquiesce in the various 35 U.S.C. § 103(a) rejections of the dependent claims in the Office Action and do not necessarily agree that the references are properly combinable. Applicants do not necessarily agree that sufficient motivation exists in each reference to suggest its combination with one or more of the other references or that such combination could reasonably be expected to be successful even if such motivation were discernable. However, these arguments are presently moot in view of the major deficiency of the principal reference.

63 are all rejected under 35 U.S.C. § 102(e) as being anticipated by Frazier. Each of these claims is likewise allowable for the same or similar reasons given above with respect to claim 1.

All dependent claims, namely claims 2-18 dependent directly or indirectly from claim 1, claims 22-38 dependent directly or indirectly from claim 21, and claims 42-58 dependent directly or indirectly from claim 41 are allowable, at least for reasons based on their respective dependencies from allowable base claims. The dependent claims are also allowable for their individual recitations.

CONCLUSION

Reconsideration and allowance of claims 1-63 are respectfully requested.

It is respectfully submitted that this Amendment should be entered under Rule 116 because the claim amendments are made in response to a suggestion by the Examiner, no new matter is added, the scope of the amended claims is not changed, no additional searching or consideration need be undertaken, and the claims narrow down the issues for appeal in the event that the Examiner does not find the instant amendment and remarks persuasive.

To the extent that an extension of time may be needed in order to enter this amendment in this case, please consider this response as including a petition under 37 C.F.R. § 1.136 for such extension of time. Please charge any fee for such petition or any other fee or cost that may be incurred by way of this amendment to Patent Office deposit account number **05-0889**. If the Examiner feels that a telephone conversation may serve to advance the prosecution of this application, she is invited to telephone Applicants' undersigned representative at the telephone number provided below.

Respectfully submitted,

JOEL WALL
Registration No. 25,648

TELEPHONE:
JOEL WALL ESQ.
508-625-1323
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